L6: Entry 7 of 232 File: PGPB Mar 21, 2002

DOCUMENT-IDENTIFIER: US 20020034336 A1
TITLE: IMAGE PROCESSING METHOD AND APPARATUS

Application Filing Date:
19970611

Detail Description Paragraph:
[0250] In the adjustment of the compression ratio using the adjustment key 50, the compression ratios of respective regions can be adjusted by independently and arbitrarily setting a compression table f(.alpha.) for adjusting the total compression ratio, a compression table for adjusting the compression ratio at the bright portion f.sub.light (.alpha..sub.light), and a compression table for adjusting the compression ratio at the dark portion f.sub.dark (.alpha..sub.dark) That is, f.sub.key is set by the following formula.

Detail Description Paragraph:
[0258] When the bright portion adjustment key (.alpha. light) of the adjustment key 50 is pressed, the key correcting section 46 sets the bright portion compression ratio .alpha..sub.light from an amount of adjustment having been input (the number of times the key is pressed) and creates the bright portion compression table f.sub.light (.alpha..sub.light)

Detail Description Paragraph:
[0263] When the reference value Y.sub.0 is fixed and the bright portion compression ratio and the dark portion compression ratio are independently set, the dynamic range can be compressed by adjusting only the bright portion and the dark portion without changing the gradation of an intermediate image density portion. Moreover, since the change of brightness of an entire image caused by the compression of the dynamic range can be prevented, brightness can be independently corrected by the second LUT 70, whereby image processing conditions can be easily set.

L6: Entry 122 of 232 File: USPT Mar 5, 1996

DOCUMENT-IDENTIFIER: US 5496106 A
TITLE: System and method for generating a contrast overlay as a focus assist for an imaging device

Application Filing Date (1):
19941213

Detailed Description Text (22):
Referring now to FIG. 7, a flow chart of the preferred method for adjusting the display to provide a false contrast overlay as a focus assist is shown. The preferred method begins in step 100 by receiving a signal representing an image and view type selection. Next in step 102, the method determines whether the view type selection includes focus highlighting. If the view type selection does not includes focus highlighting (the user selected a normal view), then the method proceeds to step 118. In step 118, the image is displayed on the output device 18 using the signal that was received in step 100 and then the method ends. However, if the view type selection is with focus highlighting then the method continues in step 104. In step 104, the method separates the signal received in step 100 into its constituent channel signals. Then in step 106, a luminance signal is received or is generated from the channel signals. For the preferred method, a luminance signal is received as part of the input. Alternatively, the green channel can be used if it has sufficient bandwidth. Next in step 108, a contrast signal that highlights the large contrasts in the image is produced from the luminance signal. In step 110, the method adjusts the contrast signal to range between a percentage, X, of the brightness displayable by the output device 18. In the preferred embodiment, the contrast signal ranges between 0% and 100%. Then in step 112, each of the individual channel signals is reduced or adjusted to be about a percentage of (100%-X) of the brightness displayable by the output device 18. In step 114, the adjusted contrast signal produced by step 110 and the reduced selected channel signal produced by step 112 are combined. This combination is preferably accomplished by adding the adjusted contrast signal produced in step 110 to the reduced red channel signal produced in step 112. While the Red channel is used in the preferred embodiment, those skilled in the art will realize that other channels such as Blue or Green or combinations there of may be used. Finally in step 116, the image is displayed using the combined signal from step 114 and the reduced versions of the blue and green channels from step 112.